HP StorageWorks

Fabric OS 4.4.x release notes

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About this document

This section identifies the audience of these Release Notes and provides a high-level description of the information it contains.

Release Notes overview

These Release Notes cover the following major topics:

Audience

These Release Notes are intended for systems administrators and technicians who are responsible for installing, operating, and maintaining Fabric OS version 4.4.x.

Fabric OS 4.4.x enhancements

Fabric OS 4.4.x contains significant enhancements in the areas of Fibre Channel long-distance support, scalability, and manageability. In addition, several improvements since the release of Fabric OS version 4.2.x have been incorporated in this release.

Major new features include:

- Support for the HP StorageWorks SAN Switch 4/32 and the HP StorageWorks Multi-protocol (MP) Router

- Increased HP Extended Fabrics support. For specific parameters, access the *HP StorageWorks SAN design reference guide*, part number AA-RMPNS-TE from:

http://h20000.www2.hp.com/bizsupport/TechSupport/DocumentIndex.jsp?contentType=Suppor tManual&locale=en_US&docIndexId=179911&taskId=101&prodTypeId=12169&prodSeriesId=4 06734

- Trunking over Extended Fabrics

    - For the HP StorageWorks 2 GB, Core Switch 2/64 and SAN Director 2/128 switches, two links up to 50 km at 2 Gbit/sec and 4 links at 10km at 2Gbit/sec

    - For the SAN Switch 4/32, three links up to 250 km at 2Gbit/sec and 100 km at 4 Gbit/sec

- Increased scalability to 2560 ports and 50 domains

- Port scalability via license keys

- Fabric Watch improvements:

    - Improved notification

    - Switch health reports

    - Standardized messaging: for example, including information such as time stamp, message number, severity, and switch name for all system messages

    - Updated security enhancements:

        - SSH

        - RADIUS

        - DH-CHAP authentication

    - Fabric Watch and Advanced Web Tools usability enhancements

Supported switches

Fabric OS v4.4.x supports the following switches:

- HP StorageWorks SAN Switch 2/8V

- HP StorageWorks SAN Switch 2/16V

- HP StorageWorks SAN Switch 2/16N

- HP StorageWorks SAN Switch 2/32

- HP StorageWorks Core Switch 2/64

- HP StorageWorks SAN Director 2/128

- HP StorageWorks SAN Switch 4/32

Technical support

Contact Hewlett-Packard support for hardware, firmware, and software support, including product repairs and part ordering. To assist your support representative and to expedite your call, have the following information available:

- Technical support contact number, if available

- Switch model

- Switch operating system version

- Error messages received

- Output from `supportshow` command

- Detailed problem description and specific questions

- Description of any troubleshooting steps already performed and results

Switch Serial Number

The switch serial number and corresponding bar code are provided on the serial number label, as shown here.

```
*FT00X0054E9
FT00X0054E9
```
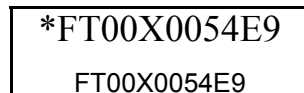
The serial number label is located as follows:

- For the SAN Switch 2/8V, SAN Switch 2/16V, SAN Switch 2/16N and SAN Switch 2/32 models—Rear chassis panel

- For the SAN Switch 4/32—On the switch ID pull-out tab located on the port side, and on the inside of the chassis, near Power Supply 1

- For the Core Switch 2/64 SAN Director 2/128—Inside front of chassis, on wall to left of ports

World Wide Name (WWN)

Use the `licenseIdShow` command to display the license ID.

Accessing documentation

Additional documentation, including white papers and best practices documents, is available at the HP web site: http://welcome.hp.com/country/us/eng/prodserv/storage.html.

NOTE: HP has made every effort to provide you with the most up-to-date Web retrieval procedures available at time of print. Note, however, that Web page links are subject to change.

To access the technical documentation:

1. Locate the **Networked storage** section of the Web page.
2. Under **Networked storage**, locate the **By type** subsection.
3. Click **SAN infrastructure**. The **SAN infrastructure** page displays.
4. Locate the **Fibre Channel Switches** section.
5. Locate the **B-Series Fabric** subsection.
6. Click the name of the appropriate switch. The switch overview page displays.
7. Locate the **Product information** section.
8. Click **Technical documentation**. Select the applicable documents.

For information about Fibre Channel standards, visit the following web site: http://www.t11.org.

Standards compliance

HP products conform to these standards in a manner consistent with accepted engineering practices and procedures. In certain cases, HP may add proprietary supplemental functions to those specified in the standards. We verify conformance with Fibre Channel Standards by subjecting our switches to SANmark Conformance Tests developed by the Fibre Channel Industry Association. Our switches have earned the SANmark logo indicating such conformance. SANmark is a limited testing program and does not test all standards or all aspects of standards.

HP Fabric OS 4.4.x conforms to the following Fibre Channel Standards:

- FC-AL ANSI X3.272: 1996
- FC-AL-2 NCIT S 332: 1999
- FC-FLA NCIT S TR-20: 1998
- FC-GS-2 NCIT S 348-2000 Rev 7.01

- FC-FG ANSI X3.289: 1996

- FC-PH ANSI X3.230: 1994

- FC-PH-2 ANSI X3.297: 1997

- FC-PH-3 ANSI X3.303: 1998

- FC-PLDA NCIT S TR-19: 1998

- FC-SW-2 Rev 5.3

- FC-VI Rev 1.61

- FC-MI Rev 1.92

- FC-BB Rev 4.7

- FC-FS Rev 1.7

- FC-BB-2 Rev 5.3

- IPFC RFC 2625

- FCP ANSI X3.269: 1996

- FCP-2 Rev 7

Important notes

This section provides information you should be aware of when running Fabric OS 4.4.x.

OS requirements

HP recommends using the *latest* software release versions to get the greatest benefit from the SAN. Refer to the following web site for information: http://www.hp.com

Maximizing fabric availability during HP StorageWorks SAN Switch 2/32 hot code activation

During code activation on a HP StorageWorks SAN Switch 2/32 running Fabric OS 4.1.0 or later, data keeps flowing between hosts and storage devices. However, fabric services are unavailable for a period of approximately 50 to 55 seconds. Possible disruption of the fabric can be minimized by ensuring that switches logically adjacent to the SAN Switch 2/32 (directly connected via an ISL) are running, at the minimum, Fabric OS v2.6.1 or later, v3.1.0 or later, or v4.1.0 or later. More information is available in the firmware download section of the *HP StorageWorks Fabric OS 4.2.x procedures user guide*.

Mixed fabric environment with different switch platforms

Fabric OS v2.6.2, v3.1.2, and v4.2.x introduced a new switch PID format: Extended Edge PID (Format 2). Extended Edge PID is useful if you introduce a Fabric OS 4.4.x switch into a fabric consisting solely of Fabric OS v2.x/v3.x switches. Before adding a Fabric OS v4.4.x switch to such a fabric, refer to the *HP StorageWorks Fabric OS 4.2.x procedures user guide* for information on the Extended Edge PID format.

NOTE: Switches must operate with Fabric OS v2.6.2, v3.1.2, v4.2.x or later to use the Extended Edge PID format.

If Extended Edge PID is set (before a downgrade from the current Fabric OS release to an earlier Fabric OS release that does not support the Extended PID format), PID needs to be set back to a supported format, such as Core PID (format 1) or native PID (format 0).

Advanced Web tool updates

When using a mixed fabric—that is, a fabric that contains v4.x, v3.x, and v2.x switches—HP recommends that you use the most advanced switches to control the fabric. For example, use the 4.x switches as the primary Fibre Channel Switch (FCS), as the location to perform zoning tasks, and as the time server. HP also recommends that you use the most recently released firmware to control the fabric.

If you use Advanced Web Tools to change the switch name, the HP StorageWorks SAN Director 2/128 Telnet console prompt does not update to the new name until a new Telnet window is opened.

If a dialog box is displayed from the Switch Admin window of Advanced Web Tools and the user selects another dialog box from Advanced Web Tools, a window display error occurs. This is a known issue in Java™ 1.3. HP recommends using Java 1.4.1_03.

Two-Domain and Four-Domain fabric licensing

If your fabric includes a switch with a license for a limited number of switches in the fabric and the fabric exceeds the limit, Advanced Web Tools allows a 45-day grace period during which you can still monitor the switch. Advanced Web Tools periodically displays warning messages.

These messages warn you that your fabric size exceeds the supported switch configuration limit and tells you how long you have before Advanced Web Tools will be disabled. After the 45-day grace period, you will no longer be able to launch Advanced Web Tools from the switch if it still exceeds the limit.

NOTE: Two-domain and four-domain fabric licensing is applicable only to 2 Gb/s switches.

Browser window response after failover

A browser window might stop responding after an HA failover immediately after a zoning configuration is enabled or disabled. It is likely that the web daemon was terminated by the HA failover before the HTTP request was returned.

If the HA module does not respond, close the window and relaunch the module. If the module is locked, shut down and relaunch the Web Tools application.

Switch View display issue

If you frequently enable or disable a switch or perform a power cycle, the Switch View may not display properly. Launching other Web Tools components might then cause a browser crash.

Upgrade your Java Plug-in to version 1.4.1_03 or later, if you are running Windows® XP.

Installing Mozilla 1.4 on Solaris 8 and Solaris 9

For instructions to install Mozilla 1.4 on Solaris 8 and Solaris 9, go to the web site: http://ftp.mozilla.org/pub/mozilla.org/mozilla/releases/mozilla1.4/mozilla-sparc-sun-solaris2.8_1.4.readme

For a list of operating systems that Mozilla runs on, go to:

http://ftp.mozilla.org/pub/mozilla.org/mozilla/releases/mozilla1.4

For general information on Java for HP-UX, go to:

http://www.hp.com/products1/unix/java/

Mozilla browser support for Switch Admin module

The Mozilla browser does not support the Switch Admin module properly in Fabric OS v2.6.x. In Fabric OS v2.6.2, a warning message is displayed. No warning message is displayed in other v2.6.x versions.

Workaround: Use Netscape 4.7.7 or later.

Browser, OS, and Java plug-in support

Advanced Web Tools browser, operating system, and Java Plug-in support is updated for Fabric OS v4.4.x. Table 1 identifies the supported browsers, operating systems, and Java Plug-ins for this release. Go to the http://www.hp.com web site for the latest list of supported operating systems.

Table 1 Browsers, Operating Systems, and Java Plug-ins

Operating System	Browser	Java Plug-in
HP-UX 11.00	Mozilla 1.4 or later	1.4.2_00 or later (up to but not including 1.5)
HP-UX 11.11 (PA 32-bit & PA 64-bit)	Mozilla 1.4 or later	1.4.2_00 or later (up to but not including 1.5)
HP-UX 11.23 (IA 64-Bit)	Mozilla 1.4 or later	1.4.2_00 or later (up to but not including 1.5)
HP-UX 11.i	+NN7.0	1.4.1_02
HP Tru64 UNIX® 5.1B	Mozilla 1.4	1.4.1_02
HP Tru64 UNIX 5.1A, 5.1b	Mozilla 1.4	1.4.1_02
HP OpenVMS 7.3-1 (64-bit)	Secure Web Browser (SWB 1.4)	1.4.1_02
HP OpenVMS 7.3-2 (64-bit)	Secure Web Browser (SWB 1.4)	1.4.1_02
HP Open VMS 7.3-x (Itanium)	Secure Web Browser (SWB 1.4)	1.4.1_02
AIX 5.1	Mozilla 1.4	1.4.1_01
AIX 5.2	Mozilla 1.4	1.4.1_01
AIX 5.3	Mozilla 1.4	1.4.1_01
Red Hat Linux® 7.3	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
Red Hat Linux 8.0	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)

Table 1 Browsers, Operating Systems, and Java Plug-ins (continued)

Operating System	Browser	Java Plug-in
Red Hat Enterprise Linux AS 2.1 (IA32)	NN7.02	1.4.1_03
Red Hat Enterprise Linux AS 2.1 (IA32 & IA64)	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
Red Hat Enterprise Linux AS 3.0 (IA32 & IA64)	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
Red Flag Linux (32-bit)	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
United Linux 1.0	NN7.02	1.4.1_03
United Linux 1.0 SUSE 8 (IA32)	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
United Linux 1.0 SUSE 8 (IA64)	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
United Linux 2.0	Mozilla 1.4 or later	1.4.2_02 or later (up to but not including 1.5)
Solaris 2.8, 2.9	Mozilla 1.2.1 (recommended) Netscape 7.0 Netscape Communicator 4.78	1.4.2 1.4.1_03
Solaris 7, 8, 9, 10	Mozilla 1.2.1 (recommended) Netscape 7.0 Netscape Communicator 4.78	1.4.2
Windows 2000	IE 6.0 SP1	1.3.1_04 or 1.4.1_02 (recommended)
Windows 2000 SP3	IE 6.0 SP1	1.4.1_03
Windows 2003	IE 6.0 SP1	1.3.1_04 or 1.4.1_02 (recommended)

Table 1 Browsers, Operating Systems, and Java Plug-ins (continued)

Operating System	Browser	Java Plug-in
Windows XP	IE 6.0 SP1	1.4.1_03 (recommended)
Windows Server 2003 (IA32)	IE 6.0	1.4.1_03
Windows NT 4.0 SP6a	IE 6.0 SP1	1.4.1_03

Table 2, Table 3, and Table 4 list important information for switches running Fabric OS v4.4.x.

Table 2   Information Specific to SAN Switch 4/32

SAN Switch 4/32	Description
SWL and LWL SFP modules release mechanism	The SAN Switch 4/32 uses an octal-style SFP cage that places SFPs in close proximity. As a result of the physical space limitation between the SFPs, HP requires the use of approved SFP modules only. Using an approved SFP module eliminates issues associated with the fit and removal of the module. Specifically, SFPs with wide bail latch mechanisms that are not flush with the body of the SFP or SFPs with "push-tab" removal mechanisms might prevent the proper insertion or removal of the SFP module. At the time of release, the following SFPs were certified for use with the SAN Switch 4/32: • HP StorageWorks 4Gb SW 4PK SFP Transceiver, A7448A • HP StorageWorks 4Gb SW SnglePK SFP Transceiver, A7446A • Short wavelength SFP, A6515A* or 300834-B21** • Long wavelength SFP, 10 km, A6516A* or 300835-B21** • Long wavelength SFP, 35 km, 300836-B21** * premerger HP part number ** premerger Compaq part number
LED, system status	The system status LED blink behavior in the SAN Switch 4/32 is different from that of legacy HP StorageWorks switches. Legacy products blink system status with amber/off, amber/off. The SAN Switch 4/32 blinks amber/green, amber/green.

Table 2 Information Specific to SAN Switch 4/32 (continued)

SAN Switch 4/32	Description
LED, system power	The system power LED behaves differently in the SAN Switch 4/32 than in SAN Switch 2/8V and SAN Switch 2/16V switches. In the latter switches, it is solid amber when a power supply FRU has failed. In the SAN Switch 4/32, the system power LED remains green, and the system status LED will blink, indicating an error.
WWN	The SAN Switch 4/32 uses a new block of WWN numbers. In addition to the current WWN, HP uses the IEEE Organizationally Unique Identifier (OUI) that was formally owned by Rhapsody Networks (now a part of Brocade Communications Systems, Inc.) for the new block of WWNs. The official IEEE OUI database has been updated to reflect this ownership change.
	Network and fabric management applications that rely on the use of the original Brocade OUI (00:60:69) to identify Brocade network elements must be updated from the IEEE Web site database (location below) to also include the new Brocade OUI (00:05:1E).
	IEEE OUI and Company_id Assignments:
	NEW
	00-05-1E (hex)Brocade Communications Systems, Inc.
	00051E (base 16)Brocade Communications Systems, Inc.
	1745 Technology Drive
	San Jose CA 95110
	UNITED STATES
	OLD
	00-60-69 (hex)BROCADE COMMUNICATIONS SYSTEMS, Inc.
	006069 (base 16)BROCADE COMMUNICATIONS SYSTEMS, Inc.
	1901 GUADALUPE PKWY
	SAN JOSE CA 95131
	UNITED STATES

Table 3 Core Switch 2/64 Information

Core Switch 2/64	Description
Power supplies	Customers reconfiguring SAN Director 2/128-only configurations by adding Core Switch 2/64 blade(s) will have to ensure that all three power supply FRUs are installed, as Core Switch 2/64 blades have greater power requirement

Table 4 Fabric OS area information

Fabric OS Area	Description
Compatibility	Sometimes in a mixed fabric of Fabric OS v4.x/v3.x/v2.x, fabric reconfiguration is caused by link reset on v3.x/v2.x. This only happens in a fabric containing Fabric OS v3.x versions released prior to v3.1.0 or Fabric OS v2.x versions released prior to v2.6.1 that are under heavy traffic or CPU-intensive operations such as large (50 KB) zone database propagation. Use the latest revision of code across all releases in a mixed fabric.
Firmware download	During a firmware download, rebooting or power cycling the CPs could corrupt the compact flash. CAUTION: Do not attempt to power off the CP board during firmware download, to avoid high risk of corrupting your flash.
Firmware download	Fabric OS v4.1.x, v4.2.x, and v4.4.x non-disruptive firmware download allows for firmware downgrades and upgrades; however, you might see warning messages such as the following: 0x239 (fabos): Switch: 0, Info PDM-NOTFOUND, 4, File not found (/etc/fabos/mii.0.cfg) These warnings can be ignored.
Firmware download, boot ROM	The boot ROM in Fabric OS v4.4 is automatically upgraded, by firmware download, to version 4.5.0 in all v4.x switches. After it has upgraded, the boot ROM will not downgrade should a firmware downgrade be performed.

Table 4 Fabric OS area information (continued)

Fabric OS Area	Description
HA switch reboot failure	When a switch reboot or a failover occurs before POST is complete, the HA resynchronization is disrupted. HA will not resynchronize until POST completes. CAUTION: Allow POST to complete before performing a switch reboot or failover, to avoid disruptive failover.
Invalid gateway IP address error message	The user will see the following message on the console during startup when the Ethernet IP and gateway IP addresses are set to the defaults: SIOCADDRT: Invalid argument ..... ip.c:311:Invalid gateway IP address 0.0.0.0 This is a display issue only and does not affect the functionality of the switch.
Logging, *syslog.conf*	In Fabric OS v4.x, the "kern" facility for syslog is no longer supported. You must update all *syslog.conf* files to support "local7" facilities. There is a new `syslogdFacility` command to set the facility level that will be used.
Logging, Solaris syslogd local7 users	When using the new syslogdFacility command to set the local7 level, if an even-numbered facility level is selected (for example, 0, 2, 4 or 6), all switch Critical system messages will appear in the *odd*-numbered *.emerg* facility level file on the target Solaris systems: for example, *local6.emerg* will appear in *local7.emerg* if syslogd facility level 6 is selected. This behavior is not observed when selecting an odd-numbered facility level initially on the switch. The problem also does not occur on Linux server systems and is currently under investigation with Sun. delete The immediate workaround is to select an odd-numbered syslogd facility level when using the syslogdFacility command.

Table 4 Fabric OS area information (continued)

Fabric OS Area	Description
Logging, supportFTP command	When setting the automatic FTP IP address, userid, password, and associated directory path for use with the supportFtp command, the parameters are not checked immediately for validity. Generate a manual trace dump to confirm the FTP transfer immediately. First, use supportFtp to set up FTP parameters. Next, use traceFtp -e to enable automatic transfer of the trace dumps. Finally, use the traceDump -n command to create a dump. Confirm that the FTP transfer was successful.
Logging, chassisName command	Run the chassisName command before upgrading to Fabric OS v4.4 so that any subsequent error messages related to the chassis and switch services will be logged correctly to the system error log. For further information, refer to the *HP StorageWorks Fabric OS 4.4.x procedures user guide.*
HP StorageWorks 8-Port Upgrade License	A SAN Switch 4/32 with a 16-port factory configuration requires a *HP StorageWorks 8-Port Upgrade License*, Part Number T3677A, in order to enable and use switch ports 16 thru 31.
rsh and rlogin	The programs rsh and rlogin are not supported in this release. If you try to use an rsh or rlogin client, Fabric OS rejects the login attempt; however, because most rsh and rlogin clients continue to retry the login for several seconds before timing out, your system appears to hang. Secure connections are available via a Secure Shell (SS).
Security: error counter	Telnet security errors that arrive in quick succession are recorded as a single violation by the Telnet error counter. For example, a login error from a host whose IP address is 192.168.44.247 is logged as follows: Security violation: Login failure attempt via TELNET/SSH/RSH. IP Addr: 192.168.44.247 If another login violation occurs immediately, the message remains the same and only the error counter is incremented.
Security: FCS list	Adding switches to the FCS list does not automatically join the switches in a secure fabric. Add the switches to the FCS list of the new switches and the target fabric. Reset the version stamp to 0 and either reset the E_Ports or perform a switch disable and enable for the switches to join.

Table 4 Fabric OS area information (continued)

Fabric OS Area	Description
Security: HTTP policy	If HTTP_Policy is empty, you will not be able to log in and will receive a Page not found error. This is expected behavior for this policy.
Security: invalid certificate	Web Tools and Fabric OS are not consistent in how they report switch certificate status. Web Tools reports a valid certificate with extra characters appended to it as invalid, whereas Fabric OS accepts the certificate and allows a `secmodeenable` command to complete successfully.
Security: PKICERT utility, CSR syntax	Before using the PKICERT utility to prepare a certificate signing request (CSR), ensure that there are no spaces in the switch names of any switches in the fabric. The web site that processes the CSRs and generates the digital certificates does not accept switch names containing spaces; CSRs that do not conform to this requirement are rejected.
Security: PKICERT utility, installing certificates	PKICERT v1.0.6 is the most current version of the PKICERT utility. When running the PKICERT utility to install switch certificates in a fabric that did not previously contain switch certificates and now includes a SAN Director 2/128, select the option to specify that certificates are installed only on those switches that do not currently contain certificates. SAN Director 2/128s are delivered with switch certificates preinstalled. Switches that were originally shipped with Fabric OS v2.5, v3.0, and v4.0 and have never installed and enabled Secure Fabric OS do not have certificates installed. If you need to reinstall switch certificates in a SAN Director 2/128, follow these guidelines: • The host running PKICERT 1.0.6 must be connected to a proxy switch running Fabric OS v2.6.2, v3.1.2, or v4.2. • All switches in the fabric other than the SAN Director 2/128 can run v2.6.1, v3.1, v4.1 or newer firmware.
Security: selectelnet	If you try to log in to a switch through a sectelnet client while that switch is in the process of either booting or shutting down, you might see the message, Random number generation failed. The message is printed by the sectelnet client because the switch Telnet service is not running (the service has either already been shut down, if the switch is shutting down, or is not yet established, if the switch is booting). If the switch is booting, wait a few seconds and try again.

Table 4 Fabric OS area information (continued)

Fabric OS Area	Description
Security: secure mode, passwd Telnet	CAUTION: Using the passwd Telnet command in secure mode to change the password results in all sessions using that password being logged out, including the session that changed the password. This is expected behavior. The session terminates if you change the password in secure mode.
Fabric OS: CLI commands, failover, and port disable	Changing port configurations during a failover might cause ports to be disabled. Reissue the command after the failover is complete to bring the ports online.
Security, SLAP fail counter and two switches	The SLAP counter is designed to work when all the switches in the fabric are in secure mode. All the switches in the fabric must be in secure mode for accurate SLAP statistics.
Security, SSH login	To properly connect SSH login, wait for secure mode to complete before rebooting or performing HA failover on the Core Switch 2/64 or SAN Director 2/128. If secure mode is enabled and a reboot occurs before secure mode completes, SSH login will not connect and will go to the wrong MAC address because the active CP changes after an HA failover.
Support	Fabric OS v4.4 users should run the supportSave command instead of, or in addition to, the supportShow command. Doing so will gather additional switch details and FTP all files to a customer server. Refer to the *HP StorageWorks Fabric OS 4.x procedures user guide* for instructions on setting up FTP services.
Trace dump	Fabric OS v4.4 users should set up automatic FTP trace dump transfers to customer FTP servers. Doing so will minimize trace dump overwrites. Refer to the *HP StorageWorks Fabric OS 4.x procedures user guide* for instructions on setting up FTP services.

Table 4 Fabric OS area information (continued)

Fabric OS Area	Description
Upgrading to Fabric OS v4.4.x	Recommended upgrade procedures to Fabric OS v4.4 include the following: Before loading v4.4: • Run `configupload`. Creates a backup configuration, should the user want to return to v4.2. • Run `supportShow`. Captures the previous error logs in v4.2. • Run `chassisName`. Changes the default factory configuration to a more meaningful name. After loading Fabric OS v4.4, refer to "Logging, supportFTP," earlier in this table.
WWN card FRU repair	If an HA failover or power cycle occurs during a FRU replacement on the WWN card, the Core Switch 2/64 or SAN Director 2/128 is nonoperational. CAUTION: When performing a FRU replacement on a WWN card, complete the FRU procedure before attempting an HA failover or power cycling the chassis.
Zoning	Issue: Domain 0 in a zoning configuration file is invalid but has not been previously enforced. Workaround: Prior to upgrading a switch to Fabric OS v4.2.x or later, ensure that the fabric's zoning configuration does not contain domain ID 0, which is used for zoning. This is specific only to v4.x switches.
Zoning	When enabling a new zone configuration, the user must ensure that the size of the zone configuration does not exceed the minimum size supported by all the switches in the fabric. Zone configuration sizes can be determined by executing cfgsize on all the switches in the fabric.

Commands modified in Fabric OS 4.4.x

The `supportSave` command was modified in this release, as follows:

`supportSave`

Under the `supportSave` command, in the "Description" section, replace this text:

"RASLOG*switchname-slot-YYYYMMDDHHMM-errDumpAll.ss*

TRACE*switchname-slot-YYYYMMDDHHMM-tracedump.dmp*

`supportShow`*switchname-slot-YYYYMMDDHHMM-supportShow* (saved in the specified remote directory)"

Add this text:

"RASLOG*chassisname-slot-YYYYMMDDHHMM-errDumpAll.ss*

TRACE*chassisname-slot-YYYYMMDDHHMM-tracedump.dmp*

`supportShow`*chassisname-slot-YYYYMMDDHHMM-supportShow* (saved in the specified remote directory)"

Documentation updates

This section provides information on last-minute additions or corrections to the *HP StorageWorks Core Switch 2/64 and SAN Director 2/128 installation guide.*

Replace Table 12 on page 77 with the following:

Table12: WWN Bezel LED Patterns

LED Name, Location	LED Color	Status of Hardware	Recommended Action
16-Port card/CP card Power	Steady green	Power is OK	No action required.
	Flashing green	Power to port card is OK; however, this LED flashes if the port card status LED is flashing.	Check port card status LED and determine if it is flashing slow (2 second increments) or fast (1/2 second increments) and then take appropriate action.
	No light (LED is OFF)	No port card present or power source is unavailable.	Insert port card, or check AC switch or power source.
	Check the individual port card (see Figure 15 on page 81) or CP card power LEDs (see Figure 16 on page 85) on the port side of the chassis to confirm the LED patterns.		
16-Port card/CP card Status	Steady Amber	Port card is faulty.	Check port card.
	Slow-flashing amber (on 2 seconds; then off 2 second)	Port card is not seated correctly or is faulty.	Pull card out and reseat it. If LED continues to flash, replace card.
	Fast-flashing amber (on 1/2 second, off; then off 1/2 second)	Environmental range exceeded or port card failed diagnostics (run during POST or manually).	Check for out-of-bounds environmental range and correct it. Replace card if it fails diagnostics.

Table12: WWN Bezel LED Patterns

LED Name, Location	LED Color	Status of Hardware	Recommended Action
	No light (LED is OFF)	Port card is either healthy or does not have power.	Verify that the port card power LED is on.
	NOTE: Check the individual port card (see Figure 15 on page 81) or CP card status LEDs (see Figure 16 on page 85) on the port side of the chassis to confirm the LED patterns.		
Power supply/ Power/Status	Steady green	Power is OK.	No action required.
	Steady amber	Power supply is faulty.	Ensure that the correct AC power switch is on and the power supply is seated. If LED remains on, replace the power supply.
	Slow-flashing amber	FRU header (SEEPROM cannot be read) due to I2C problem.	Replace power supply.
	Fast-flashing amber	Power supply is about to fail due to failing fan inside the power supply.	Replace power supply.
	No light (LED is OFF)	No power supply present or is not inserted/seated properly, or power source is unavailable.	Insert power supply module, ensure it is seated properly, or check AC switch or power source.

Closed issues from previous 4.2.2a release

Table 5 lists defects that have been closed since the last Fabric OS 4.x release, version 4.2.2a.

Table 5   Closed issues for Fabric OS 4.2.2a

Fabric OS 4.2.2a Issue	Status
Switch is rebooting Fabric OS version 4.0.0.c.	Fixed.
Compact Flash is full due to large wtmp file	Fixed.
Core Switch 2/64 fails to come online to MVS - Command Rejects.	Fixed per the following solution: Read Port Descriptor command wasn't setting 'Port Address Not Implemented' bit correctly for area 0xFF. Due to this MVS to fail bring CUP online. The fix is to set 'Not implemented' bit for area 0xFF.
Unsupported version 2/3 Name Server entry object caused switch fail to interop with specific vendor switch.	Fixed.
During zone merge of zone DB > 55k, zoning block transmit task and causes fab reconfiguration.	Fixed.
Switch panic when removing cables.	Fixed.
Switch is not sending RSCN, after target device registers to name server with RFT_ID	Fixed.
QLV2352 HBA speed negotiation problem in 2 Gb/s switch	Fixed.
Host cannot see the target on a remote switch.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Track Logging Feature does not detect failure login to the switch via SSH.	Fixed.
Switch (active CP) reset when switchdisable/enable script running.	Fixed.
Modifying switch and CP IP addresses caused a telnet hang.	Fixed.
After fastbooting standby CP of the primary FCS, doing secfcsfailover before HA is in sync results in old primary FCS switch's active CP panicking.	Fixed.
Message "Oops: kernel access of bad area, sig: 11" shows up and switch reset.	Fixed.
Switch Status Marked As Healthy When CF (compact Flash) 100% Full With Write Errors.	Fixed.
After changing Ethernet IP address from CLI or from WT, can not launch WT with new IP address.	Fixed.
v4.1.1_rc2 Firmware Download Hangs Switch After Critical SYSC-ERROR Seen.	Fixed.
SAN Switch 4/32 error and reboot: 'Critical kSWD-kSWD_GENERIC_ERR_CRITICAL, 1, kSWD:	Fixed.
Switch Failed To Generate Any Event, KSWD, Core Dump Notification After RPCD Issue.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Mechanism needed to monitor or prevent all instances of compact flash using 100% of capacity. Under some rare circumstances, the flash file system fills up completely.	Fixed.
Switch reboot with CF Error: hda: status timeout ...	Fixed.
Switch: 0, Critical SCN-SCNQ_OVERFLOW, 1, SCN queue overflow for nsd	Fixed.
Unable to activate `NoNodeWWNZoning` with just the `cfgenable` command. Workaround: Use `cfgdisable` followed by `cfgenable`, instead of just `cfgenable`.	Fixed.
SCAL WT: Critical error on SCN queue overflow for weblinker.fcg after disabling all trunks on core switches.	Fixed.
When `frureplace` procedure was executed for a "bad wwn card," the corrupted data on the bad card is copied over to new card.	Fixed.
During a `firmwaredownload` operation, if the power to the switch is interrupted, the message "Oops kernel access of bad area" may appear on the console.	Fixed.
Web Tools shows wrong thermal status.	Fixed.
Enc_out errors generated on ports with nothing plugged into them other then the SFP.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
If the IP addresses are set up on a network that is configured with IP address that are 10.0.x.x and a subnet mask of 255.255.0.0, there will be routing between eth0 and eth1. This is not the expected behavior, as eth0 traffic should not be routed to eth1.	Fixed.
Switch ports are set to faulty when certain tasks are performed in Win2003 clustered environment. A `portshow` that was taken before and after starting the cluster services were started and shows that the link failure count increases by the number of attached disk drives (this means, 33 disks = 33 link failures) At a certain point switch disables the port and the following error message is observed: Switch: 0, Warning PORT-LINK_FAULT, 3, Port 6 Faulted because of many Link Failures	Fixed.
Changed the time and the tsd crashed on all switches in fabric.	Fixed.
There will be no error messages shown when switch recovery or bootup failed.	Fixed.
For SAN Director 2/128, CP doesn't complete its boot sequence.	Fixed.
In a mixed fabric, a SAN Director 2/128 at the core, panicked and ms daemon died with error message on the console when a test script to reboot all the switches in the fabric at the same time was executed.	Fixed.
Cannot enable long distance mode from Web Tools.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Fabric Manager: FM Database shows less number of devices for 2+6 fabric than what is seen in nameserver entries.	Fixed.
Core Switch 2/64 CP failover due to zone daemon failure.	Fixed.
After zoning is changed from mixed to all wwn zoning, host F-Ports loses access to target F-Ports.	Fixed.
Fabric Manager does not disable port 126 when FMS mode is enabled.	Fixed.
During configuration change on a target, a continuous flood of RSCN's was generated in a short time frame which caused Name Server daemon to panic.	Fixed.
The switch returns Unit Check on the CUP port after a file lock is released with a configuration file where PDCM has ports prohibited to themselves.	Fixed.
Incorrect BA_Rjt Implementation per FC-FS spec.	Fixed.
Web Tools won't display Switch #1.	Fixed.
Running Sak-excite with recovery, fails to recover after 'resets'.	Fixed.
When all the fans are stopped (0 RPM) on SAN Switch 2/8V. The switch did not displaly an error message and switch did not shutdown or reboot.	Fixed.

Table 5   Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Some CHPIDs are not able to access the devices after an IOCDS change and 'config POR'. It appears that FLOGI to the devices get F_RJT with reason code x04. A port disable and port enable at the switch for the CHIPID corrects the problem.	Fixed.
Using Script continuously telnet login/logout, some sessions fail with timeout.	Fixed.
When POST is running, reset the micro switch on the active CP. The standby CP will become active CP now. However, the console of this current active CP will show an error message "Critical PLATFORM-CP_SERVICE, 1, Internal routing error. Disabling switch(es)". When the POST test are successfully done, the switch is in "disable" state.	Fixed.
Host lost connection to storage after "host reboot" stress script testing.	Fixed.
Commands not permitted in the present login must display "Permission denied" message.	Fixed.
perfShowEEMonitor slot/port, interval of 5 will print out one line of all ZERO when it reach the RX and TX count some where around 0x40000000.	Fixed.
SNMP FRU history trap is not always generated as expected.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
An update to the standards protocols was made for the GATIN command, and the new modes are not supported This is a MS command used to discover the topology of the fabric.	Fixed.
No log message is generated when one CP resets the other CP.	Fixed.
When configuring a route the user may in a rare instance receive an incorrect error message "Input port not available for routing".	Fixed.
The disable event is being reported twice via the API. The two events being reported are "Trunking port down" followed by "Port Down".	Fixed.
Users who attempt to upgrade switch firmware from Fabric Manager or Web Tools, will see a time difference of 8 hours.	Fixed.
Wrong value in Enterprise field of coldStart Trap from SAN Switch 4/32 (FOS v4.0.2c)	Fixed.
In the Web Tools display, when a trunk group is segmented, only the trunk master is shown with a blinking light indicating an error. The other links in the trunk continue to be shown with a solid green light, suggesting no error.	Fixed.
Vendor specific part number of the switch is not accessible thru SNMP. Vendor specific soft serial number can be accessed thru swSsn (SW mib), if the ssn entry is available in configuration database. Otherwise, swSsn gives the WWN of the switch.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Failover during hardware configuration operations may leave the port in an inconsistent state.	Fixed.
Activating Trunking at the switch level (switchCfgTrunk) when a long-distance port is currently configured causes the error message "No Trunking support of long distance port" to be displayed, which is correct. However, other trunk ports are then left in a disabled state.	Fixed.
Trying to commit after creating an alias that's about 128K would fail with -55 (ERR_COMMIT_FAILED) while using a Core Switch 2/64 in a secure fabric as proxy.	Fixed.
Able to reset version time stamp when logged in as "user".	Fixed.
Trying to Activate a ZoneSet that's about 128K, the AddObjectAttribute() call returns -56 after around one minute.	Fixed.
Attempting to retrieve the security policy via the Fabric Access API immediately after activating a new SCC policy will cause the retrieval command to fail.	Fixed.
Attempting to retrieve the security policy via the Fabric Access API immediately after activating a new SCC policy will cause the retrieval command to fail.	Fixed.
Some zone groups are lost on a CP failover.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
When setting `fcpProbeDisable` to 1 through `configure` command fcAL.fanFrameDisable will automatically be set to 1.	Fixed.
Web Tools displays an incorrect value for the current value on smart SFPs.	Fixed.
`AddSetMember` failing to add License key to switch, when 4.1.1 is proxy and other F/W is target.	Fixed.
SNMP FW-BELOW Trap for EnvFan is not sent after haFailover.	Fixed.
Web Tools and CLI event time are not the same when the `tstimezone` is configured. When the `tstimezone` is not configured then the event times match.	Fixed.
Web Tools Does Not Show Duplicate Entries Contained In Zoning On Switch.	Fixed.
156146 Blades Posting Missing From ErrorLog/Eventlog Messsages.	Fixed.
9830202 Intuit can't set FCIP address on the SAN Switch 4/32.	Fixed.
Switch gets into a state where all SNMP queries to ConnUnitEvent table timeout.	Fixed.
The wrong output displays via the `portCfgShow` command.	Fixed.
After firmware download to a Core Switch 2/64, an API application does not receive download completion event.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
The message displayed when Web Tools license is removed, and later added, is inaccurate.	Fixed.
`syslogd` does not send out the right number of errors to host.	Fixed.
When the `secmodeenable` fails due to the absence of certificates on multiple switches in the fabric, an error is reported for only one of the switches missing a certificate.	Fixed.
If you set the fan threshold below the current fan value, fanshow indicates that the fan is still OK.	Fixed.
Zone DB propagation may seem slow.	Fixed.
GATIN will return an accept for a non-existent port in the fabric.	Fixed.
A single security violation error entry is logged when multiple similar violations originating from different IP addresses are detected.	Fixed.
Switch panic with out of memory when doing continuously HBA reset.	Fixed.
The error "SEC-RSENDFAIL, 2, RCS process fails: Bad RCA" message is reported during a zone merge test. The fabric still forms correctly.	Fixed.
Ethernet port LEDs for the SAN Switch 2/8V and 2/16V are not shown in the Web Tools Switch View. Also, no SAN Switch 2/8V and 2/16V LEDs are shown for the Ethernet Port.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
On a large fabric, when using a v4.x switch as a proxy, an ERR_LOGICAL_BUSY is always returned when discovering one particular switch (dev185) with the API.	Fixed.
If customer has an EE monitor defined that incorporates the last 15 ports and changes the PID format to "2", the resulting EE monitor will change to an out of range port number. E.g. 7f changes to 8f.	Fixed.
SCALABILITY: Zone contents between memory and flash show differences. Switch will not join in the sec fabric after fastboot.	Fixed.
API Applications that use `GetAllObjects`, in a large Fabric with a large number of devices, may observe that this function takes a long time to complete.	Fixed.
A single security violation error entry is logged when multiple similar violations originating from different IP addresses are detected.	Fixed.
API Applications that use GetAllObjects, in a large Fabric with a large number of devices, may observe that this function takes a long time to complete.	Fixed.
Firmwaredownload failed on one of the core chassis (Core Switch 2/64) when there were 21 switches doing firmwaredownload at the same time in 4x30 fabric	Fixed.

Table 5   Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Board won't boot all the way if it loses its boot environmental Variables. Console output would look like this: The system is coming up, please wait... Unable to read configuration data WARNING: Failed to set EMAC hardware addresses! 1) Start system. 2) Recover password. 3) Enter command shell. Option? 0	Fixed.
For debugging usage, PortID in the "portlogdump" should refer to the Area number of the "switchshow" when "Extended Edge PID" is set.	Fixed.
"Incompatible flow control" warning messages should refer to the "Area number" of the "switchshow" when "Extended Edge PID" (format 2) is set.	Fixed.
crossporttest -nframes 1000 and failover, got OOPS. This problem only happens on a Core Switch 2/64 when crossporttest -nframe 1000 is executed on switch 1 (does not happen when test is executed on switch 0) issue hafailover, then OOPS occurs on the current standby CP.	Fixed.
Misleading PCI debug message generated during slot scan. Error message "db_scan_slot: failed to read header type func 0 dev 14 bus 2, ret= -22" observed when powering slot off then back on.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
`hafailover` on SAN Director 2/128 caused port blade vacant, but the status LED on the port blade shows it is in a good state.	Fixed.
On PID format conversion max cfgsize limit is not enforced.	Fixed.
In a 4x16 fabric with zone db size 35K,the Zone administration window opened from Fabric Manager does not show the last two zone members properly.	Fixed.
When user tries to download a config file which has a license entry [Licenses] to a switch which does not have a license file /etc/fabos/license created, this error will show up. "error creating new license file" The operation will succeed anyway.	Fixed.
Critical Error:Post Diag. Stopped, No Longer Transmitting, Counter Stuck; Blade Faulted.	Fixed.
PID change to 2, segments legacy switches and only reports 1 out of 3 ports affected.	Fixed.
I/O failure in fabric with HP switches running Fabric OS 3.0.2c & Fabric OS 4.2.0.	Fixed.
Help pages on some commands reference the Core Switch 2/64 in the example section.	Fixed.
`cfgactvshow` can only be executed from the primary FCS Switch.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Port log "disable" or "enable" entry is not logged in port log when Fabric Watch's PortLogLock alarm trigger is used to log a port log of a port.	Fixed.
When using the `bladeDisable` or `bladeEnable` command there is no output to the user to let them know whether the command failed or succeeded.	Fixed.
If a slot is disabled using `bladeDisable` command, the `slotShow` command shows the slot as enabled, this may lead the user to incorrectly assume that the command failed.	Fixed.
GUI HA Admin Fails To Indicate The Sync State Of CPs.	Fixed.
SAN Switch 2/32 displays ENC_ERR when no cable plugged in on 4.0.2; SAN Switch 2/8V and 2/16V shows same error with 4.2	Fixed.
"Do not power cycle" message does not appear in Web Tools during firmwaredownload.	Fixed.
With the 3.1.x code, when you run a `cfgshow` via a telnet session, it pauses the output one screen at a time. With the 4.x code, this is not the case.	Fixed.
Commands `fanShow` and `sensorShow` do not report Fabric Watch threshold levels correctly.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
When doing `chassisconfig 2` on the SAN Director 2/128, occasionally, after CP1 was rebooted twice and after CP1 came back, HA was out of sync.	Fixed.
When doing zone propagation from one of edge on the SAN Switch 2/32, on core and edge, there was message "Warning BLOOM-TRNK_SLV_DWN" showing up. When `switchshow` on that port is checked, there is no indication on port offline.	Fixed.
`wwnhsclient` and `wwnhserver` command info is inconsistent.	Fixed.
Running `secfcsfailover` script overnight will have memory leak on the switch.	Fixed.
When GE_PT is sent from the SAN Switch 2/32 to the SAN Director 2/128, the extended format header GE_PT displays differently.	Fixed.
1. Fabric Watch does not generate a FRU_ABSENT message after active CP is pulled out. 2. Fabric Watch generates FRU_ABSENT when active CP is inserted immediately, or after a couple of minutes.	Fixed.
Following successful firmware download, and reboot -f, the following error message may be seen: "ECC Corr Err: BK1, Odd wd ln 1".	Fixed.
Ethernet port failed to send MAC address after link negotiation.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Customer may encounter coldstart trap not being received on the SAN Director 2/128 with all types of reboot methods.	Fixed.
cpstatus changed and fruhistory traps are not generated while doing hafailover on the SAN Director 2/128.	Fixed.
Reload of switch configuration causes port to go offline.	Fixed.
When doing a firmware download on a SAN Switch 2/32, EMD and SNMPD panic may occur, when upgrading firmware from 4.1x to 4.2x	Fixed.
After deleting user accounts via Fabric Manager, you are still able to login into switch from Fabric Manager using deleted user accounts.	Fixed.
Add license fails with certain proxy-target combinations if the license key already exists in target switch.	Fixed.
When executing switchcfgtrunk 0, the following error message may be seen on the console: 0x257 (fabos): Switch: 0, Error FABRIC-FAB_ME_ERROR, 2, Management Entity IPC error, -984, to inform fabric is stable.	Fixed.
IU memory holding: about 1000 active IUs are not being released in the time period window monitored, eventually the memory is released.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
When running `switchdisable`; `cfgclear`; `cfgdisable`; `switchenable` on all core switches (2 - 3900s and 1 - 24K), an error message: 0x23b (fabos): Switch: 0, Critical SCN-SCNQ_OVERFLOW, 1, SCN queue overflow for process webd occasionally occurs on the core 24K switch.	Fixed.
In the `supportShow` "Description" section, need to change the third sentence currently reads, "These commands are organization by groups..." to "These commands are organized by groups..." In `supportShowCfgDisable`, the "Synopsis" section does not include the perfmon and ficon operands in the "Operands" section.	Fixed.
Unable to change the proxy switch IPGateway from API.	Fixed.
SCALABILITY: (stress) CP will reset if 100Mbps traffic is transmitted on ethernet port.	Fixed.
Unable to execute "quiteMode" under user login. According to help page, user should be able to display the current mode.	Fixed.
Sec Fabric: Unable to Apply or Cancel changes made to FWClassArea class when proxy is non-Primary, and modifying local switch.	Fixed.
Web Tools Zone admin: refresh icon keeps flashing when user saves local work instead of refreshing from switch.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Created an user defined account using `userConfig` command, after firmwaredowngrade to v4.2.x, still able to login with this user defined account	Fixed.
Standby CP getting "Failed expression" error in rcs_ha.c. The problem happens intermittently. The last time this problem happens when both CPs are rebooted almost at the same time. A message showed up on standby CP console. The end result is that standby CP cannot sync up with the active CP.	Fixed.
Created user defined account using the `userconfig` command, firmwaredowngrade to v4.2.x then firmwareupgrade back to v4.3.x. After the upgrade, the user defined account does not exist.	Fixed.
trapReg mib variable is giving trap recipients details for SNMPv1 alone. It has to be implemented for SNMPv3 also.	Fixed.
After disabling Port Log through API and going to telnet session, doing `portLogClear` will enable port log !	Fixed.
Application 'evmd'(pid 890) got exception 11 and SWD panic on evmd occurred right after coredump.	Fixed.
Illegal HBA registration. HBA is allowed to register even though the originating port is not in the HBA's registered port list.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
When running the test program from the mainframe under heavy stress conditions (multiple LPARs, multiple paths, etc), IFCC errors are observed on the Host. The Channel sends ABTS to a CCW chain after it has timed out waiting 2 seconds for a response.	Fixed.
Web Tools SID/DID predefined window display "cannot open SID/DID:null" message.	Fixed.
Using https to access a 4.2.x platform switch, and access another remote 4.2.x switch from Web Tools. Web Tools takes a long time to connect to the remote switch.	Fixed.
https to remote switch cause Web Tools hangs.	Fixed.
An error occurs on a switch in the secured fabric, however SwitchSecStatus of switch object shows OK; status should be SWITCH_STATUS_SEC_ERROR.	Fixed.
Fabric Manager: Enable sec.mode via wizard fails if one of chassis switches is not populated with ports.	Fixed.

Table 5   Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status

NSD panic in deleting timer.
 	
Symptom: In a fabric of mixed 16 different type of switches (core-edge) design, panic occurred either during power cylce or reboot process using one of the following procedure:
   1. Power cycle all switches with diagenablepost active
      -Invoke diagenablepost in all switches
      -Power off all switches
      wait for 10 minutes
      -Power on all switches
   2.Reboot all switches simultaneously with diagenablepost active
      -Invoke diagenablepost in all switches
      -Reboot all switches simultaneously
	Fixed.

When creating a new hardware based wwn group for one host, some remaining hosts lose connectivity and I/Os are rejected with certain storage arrays.	Fixed.
In Web Tools the Cancel button in Reset Allegiance dialog still performs Reset Allegiance function.	Fixed.
When setting monitors (for initiator/target pairs), duplicate entries may occur.	Fixed.
When switch was zone using WWN, with three machine configured with IP over FC connected to the switch . When moved one of the switch port to another port on the blade that IP for the machine would stop working.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
A zone was created on a fabric and the zone was not exported through router.	Fixed.
FSSME should take on default values if fssme.conf file is corrupted or not present instead of preventing switch from bootup.	Fixed.
FM: Cryptic Error message showing up in Events table; needs to clearly indicate why the error occurred.	Fixed.
When number of corefiles reached limitation (10) on a switch, old corefiles should be remove to make room for new corefiles.	Fixed.
Trunk master changed event is not received if is proxy.	Fixed.
MVS can't write a file to the switch. In the read configuration command, the GCSGID field should be set to 0x02B9 according to the CUP spec.	Fixed.
During overnight stress tests on the CUP port, Interface control checks were observed on the mainframe.	Fixed.
In Web Tools pop up window for FRUs, GUI displays wrong switch type information.	Fixed.
Refresh button in Port Connectivity adds additional set of ports in the column display.	Fixed.
`ipaddrset` generates segmentation error when set hostname too long.	Fixed.

Table 5 Closed issues for Fabric OS 4.2.2a (continued)

Fabric OS 4.2.2a Issue	Status
Fan, Temp and Power buttons shows no data if FabricWatch license is not installed.	Fixed.
After switch install, third party I/O Module management software did not show the last letter of a patch revision number.	Fixed.
Time in Minutes" scale is wrongly labeled. 5 mins, 10 mins, 15mins.	Fixed.
Core Switch 2/64 fails backport test when certain Domain IDs are used	Fixed.